

August 23, 2002

Mr. Mark Rees
Dalton Corporation, Warsaw Manufacturing Facility
P.O.Box 1388
Warsaw, Indiana, 46581-1388

Re: 085-15816-00003
First Administrative Amendment to
Significant Source Modification to Part 70
085-14027-00003

Dear Mr. Mark Rees:

Dalton Corporation, Warsaw Manufacturing Facility was issued a Significant Source Modification to Part 70 Source on February 22, 2002 for installing a new hot box core making line and two (2) core ovens on the phenolic core making lines #4 and #5. A letter requesting a revision to the minimum temperature of the gray iron cupola's upper stack in condition D.3.7 of the source modification was received on July 03, 2002. The requested change is to make the requirement consistent with the revised 326 IAC 9-1-2 (Carbon Monoxide Limits) rule filed on January 07, 2002. Pursuant to the provisions of 326 IAC 2-7-11 the permit is hereby administratively amended as follows (the language deleted is shown with strikeout and the language added is shown in bold):

D.3.7 Temperature Monitoring

The Permittee shall continuously record the operating temperature of the upper stack when the cupola is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the upper stack temperatures shall be maintained at a minimum of ~~1400~~ **1300** degrees F **for a minimum retention time of three-tenths (0.3) second** with an afterburner ramp-up time of 30 minutes or the length of time the cupola was off blast, ~~or a minimum temperature established during the latest stack test.~~ The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the temperature is below the above mentioned minimum for any one reading.

All other conditions of the Significant Source Modification to the Part 70 permit shall remain unchanged and in effect. Please find enclosed the entire amended permit document. The amended Significant Source Modification to Part 70 Permit will be incorporated in the Part 70 operating Permit 085-6708-00003, before its issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Ghassan Shalabi, at (800) 451-6027, press 0 and ask for Ghassan Shalabi or extension (3-0431), or dial (317) 233-0431.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

GAS

cc: File - Kosciusko County
U.S. EPA, Region V
Kosciusko County Health Department
Northern Regional Office
Air Compliance Section Inspector Dick Sekula
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Dalton Corporation, Warsaw Manufacturing Facility
1900 East Jefferson Street
Warsaw, Indiana 46581-1388**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 085-14027-00003	
Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 22, 2002

First Administrative Amendment No.: 085-15816-00003	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 23, 2002

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary gray iron foundry

Responsible Official: Mr. Mark Rees, Plant Manager
Source Address: 1900 East Jefferson Street, Warsaw, Indiana, 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Phone Number: 219-267-8111
SIC Code: 3321
County Location: Kosciusko
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major, under PSD
Major Source, Section 112 of the Clean Air Act
1 of the 28 listed source categories (secondary metal production facility)

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- I. A new hot box core making process with a maximum capacity of 18 tons per hour. The process includes the following emission units:
 - (a) Sand Silo, with a maximum capacity of providing 18 tons of sand per hour to hot box sand mixer # 9, utilizing an integral bin vent for particulate matter control during loading.
 - (b) Sand bin, with a maximum capacity of providing 18 tons of sand per hour to hot box sand mixer # 9, utilizing a cartridge collector for particulate matter control.
 - (c) Hot Box Sand Mixer, identified as #9, with a maximum capacity of 18 tons of sand per hour utilizing resin and catalyst.
 - (d) One (1) 1.5 MMBtu/hr natural gas fired Hot Box Core Machine, identified as #8, with a maximum capacity of 4.5 tons of sand per hour, utilizing a core box cleaner and release agent.
 - (e) Two (2) 1.5 MMBtu/hr natural gas fired Hot Box Core Machines, identified as #9 and #10 with a maximum capacity of 6 tons of sand per hour each, utilizing a core box cleaner and release agent.
 - (f) Hot Box Core Wash Dip Tank, identified as #1, with a maximum capacity of 16.5 tons of sand per hour.
 - (g) Two (2) Natural gas fired Core Ovens, identified as #1 and #2, with a maximum capacity of 4.0 MMBtu/hr of natural gas each.

- II. Two (2) core ovens on the phenolic core making lines #4 and #5:
- (a) One (1) 2 MMBtu/ hr natural gas fired core oven, identified as Natural Gas Core Oven #8, installed on the phenolic coremaking line #4.
 - (b) One (1) 2 MMBtu/ hr natural gas fired core oven, identified as Natural Gas Core Oven #9, installed on the phenolic coremaking line #5.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

- (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request [326 IAC 2-7-11(c)(3)].

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitation), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.10 Compliance Response Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- I. A new hot box core making process with a maximum capacity of 18 tons per hour. The process includes the following emission units:
 - (a) Sand Silo, with a maximum capacity of providing 18 ton of sand per hour to hot box sand mixer # 9, utilizing an integral bin vent for particulate matter control during loading.
 - (b) Sand bin, with a maximum capacity of providing 18 ton of sand per hour to hot box sand mixer # 9, utilizing a cartridge collector for particulate matter control.
 - (c) Hot Box Sand Mixer, identified as #9, with a maximum capacity of 18 tons of sand per hour utilizing resin and catalyst.
 - (d) One (1) 1.5 MMBtu/hr natural gas fired Hot Box Core Machine, identified as #8, with a maximum capacity of 4.5 tons of sand per hour, utilizing a core box cleaner and release agent.
 - (e) Two (2) 1.5 MMBtu/hr natural gas fired Hot Box Core Machines, identified as #9 and #10 with a maximum capacity of 6 tons of sand per hour each, utilizing a core box cleaner and release agent.
 - (f) Hot Box Core Wash Dip Tank, identified as #1, with a maximum capacity of 16.5 tons of sand per hour.
 - (g) Two (2) Natural gas fired Core Ovens, identified as #1 and #2, with a maximum capacity of 4.0 MMBtu/hr of natural gas each.
- II. Two (2) core ovens on the phenolic core making lines #4 and #5:
 - (a) One (1) 2 MMBtu/ hr Natural gas fired core oven, identified as Natural Gas Core Oven #8, installed on the phenolic coremaking line #4.
 - (b) One (1) 2 MMBtu/ hr Natural gas fired core oven, identified as Natural Gas Core Oven #9, installed on the phenolic coremaking line #5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the sand silo with integral bin vent is 28.43 pounds per hour when operating at a process weight rate of 18 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the sand bin is 28.43 pounds per hour when operating at a process weight rate of 18 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 VOC and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The resin input to the hot box sand mixer #9 of the new hot box core making process shall be limited to 72,783.76 gallons per twelve (12) consecutive month period rolled on a monthly basis and VOC content of the resin shall not exceed 3.5 percent by weight.
- (b) The catalyst input to the hot box sand mixer #9 of the new hot box core making process shall be limited to 14,716.51 gallons per twelve (12) consecutive month period rolled on a monthly basis and the VOC content of the catalyst shall not exceed 7.7 percent by weight.
- (c) The wash input to the core wash dip tank #1 of the new hot box core making process shall be limited to 39,207.57 gallons per twelve (12) consecutive month period rolled on a monthly basis and the VOC content of the core wash shall not exceed 2.0 percent by weight.
- (d) The release agent usage for the new hot box process line shall be limited to 6,828.31 gallons per twelve (12) consecutive month period rolled on a monthly basis and the VOC content of the release agent shall not exceed 1.2 percent by weight.
- (e) In conjunction with the above limits and emission ratio of 2.1215 pounds per ton of sand, the VOC PTE from the hot box sand mixer #9, core machines #8, #9, #10 and the core wash dip tank shall be limited to less than 25 ton per year.

Compliance with the above conditions will also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) not apply.

D.1.3 PM and PM10 Limits [326 IAC 2-2]

In order to render the requirements 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The sand input to the sand silo and the sand bin associated with the hotbox mixer #9 shall not exceed a rate of 18 tons per hour and 0.32 pounds of PM per ton of sand handled.

This limit is equivalent to limited PTE PM of less than 24.50 tons per year. Thus the requirements of 326 IAC 2-2 are not applicable.

- (b) The sand input to the sand silo and the sand bin associated with the hotbox mixer #9 shall not exceed a rate of 18 tons per hour and 0.18 pounds of PM10 per ton of sand handled.

This limit is equivalent to limited PTE PM10 of less than 14.50 tons per year. Thus the requirements of 326 IAC 2-2 are not applicable.

Compliance with the above conditions will also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the sand bin's cartridge collector.

Compliance Determination Requirements

D.1.5 Particulate Matter (PM)

In order to comply with D.1.1 and D.1.3 (a) and (b) the cartridge collector and the silo's integrated bin vent for PM control shall be in operation at all times that the sand silo loading and the sand handling systems are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the cartridge collector and the silo's integrated bin vent stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere during loading. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Cartridge Filter Inspections

An inspection shall be performed each calendar quarter on the cartridge filter. All defective filters shall be replaced.

D.1.8 Broken or Failed Cartridge Filter Detection

In the event that filter failure of the cartridge filter has been observed, the failed unit and the associated process will be shut down immediately until the failed unit has been repaired or

replaced. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the cartridge collector and the silo's integrated bin vent stack exhaust once per shift during normal daylight operations when exhausting to the atmosphere during loading.
- (b) To document compliance with conditions D.1.2 (a), (b), (c) and (d) the Permittee shall maintain records of usage of the hot box resin, the hot box catalyst, hot box core wash and release agent used in the new hot box core making process.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 (a), (b), (c) and (d) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Cupola charge handling operations, constructed prior to 1977, with a nominal charge rate of 53.45 tons of solid metal, coke and limestone per hour, with emissions uncontrolled

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (a) The PM emissions from the charge handling operation shall be limited to 0.6 pounds per ton of metal charged.
- (b) The PM10 emissions from the charge handling operation shall be limited to 0.36 pounds per ton of metal charged.
- (c) The lead emissions from the charge handling operation shall be limited to 0.002 pounds per ton of metal charged.
- (d) The metal charged shall be limited to 199,194 tons per twelve (12) consecutive month period.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process.

D.2.2 Particulate Matter Emissions

Pursuant to 326 IAC 6-3-2 (Process Operations), the total particulate matter (PM) from the charge handling process shall not exceed 45.20 pounds per hour when operating at a process weight rate of 53.45 tons of material charged per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour} \end{array}$$

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.3 Record Keeping Requirements

- (a) To document compliance with condition D.2.1, the permittee shall maintain records of the metal charged each month.
- (b) All records shall be maintained in accordance with section C - General Record Keeping Requirements of this permit.

D.2.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 (d) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) cupola constructed prior to 1977, with a nominal rate of 48.5 tons of metal melted per hour and a maximum heat input capacity from coke of 69.95 million Btu per hour, with emissions controlled by wet scrubber A and two natural gas-fired afterburners and exhausting to stack A, and also with charge door emissions controlled by baghouse A;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (a) The PM emissions from the cupola shall be limited to 0.821 pounds per ton metal.
- (b) The PM₁₀ emissions from the cupola shall be limited to 0.738 pounds per ton metal.
- (c) The SO₂ emissions from the cupola shall be limited to 1.25 pounds per ton metal.
- (d) The NO_x emissions from the cupola shall be limited to 0.1 pounds per ton metal.
- (e) The VOC emissions from the cupola shall be limited to 0.009 pounds per ton metal.
- (f) The CO emissions from the cupola shall be limited to 7.250 pounds per ton metal.
- (g) The Lead emissions from the cupola shall be limited to 0.002 pounds per ton metal.
- (h) The amount of metal melted in the Cupola shall be limited to 187,919 tons per twelve (12) consecutive month period.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process.

D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the total particulate matter (PM) from scrubber controlling the cupola and the baghouse controlling the charge door emissions shall not exceed 44.3 pounds per hour when operating at a process weight rate of 48.5 tons of metal melted per hour. Note: This limitation is for both the baghouse and the scrubber combined.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the cupola, the cupola charge door, the baghouse, wet scrubber and the two afterburners.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within one (1) year after startup of the new hot box core making process, the Permittee shall perform PM, PM10 and CO testing on the baghouse and the wet scrubber controlling the cupola using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensable PM10.

D.3.5 Emission Controls [326 IAC 9-1]

- (a) In order to comply with Conditions D.3.1 and D.3.2, the wet scrubber and baghouse for PM control shall be in operation and control emissions from the cupola at all times that the cupola is in operation and during startup of the cupola.
- (b) Pursuant to 326 IAC 9-1, two afterburners shall be in operation for CO control from the cupola at all times that the cupola is in operation and during startup of the cupola.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Visible Emissions Notations

- (a) Visible emission notations of the wet scrubber and baghouse stack exhausts and of the charge door emissions shall be performed once per shift during normal daylight operations when the cupola is in operation and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.3.7 Temperature Monitoring

The Permittee shall continuously record the operating temperature of the upper stack when the cupola is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the upper stack temperatures shall be maintained at a minimum of 1300 degrees F for a minimum retention time of three-tenths (0.3) second with an afterburner ramp-up time of 30 minutes or the length of time the cupola was off blast. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the temperature is below the above mentioned minimum for any one reading.

D.3.8 Scrubber Parametric Monitoring

The Permittee shall record the total static pressure drop and flow rate of the scrubber used in conjunction with the cupola, at least once per shift when the cupola is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet scrubber is below a minimum of 34 inches of water or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of 225 gallons per minute or a minimum flow rate established during the latest stack test. A pressure reading or flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.3.9 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the cupola. All defective scrubber parts shall be replaced.

D.3.10 Scrubber Failure

In the event that scrubber failure has been observed:

- (a) The affected process will be shut down immediately until the failed unit has been replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

D.3.11 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse controlling the charge door emissions, at least once per shift when the associated process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the range of 4.0 and 10.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure

Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the cupola charge door when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.13 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.14 Record Keeping Requirements

- (a) To document compliance with condition D.3.1 (h), the permittee shall maintain records of the metal melted in the cupola each month.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the baghouse and wet scrubber stack exhausts once per shift during normal daylight hours when exhausting to the atmosphere during cupola operation.
- (c) To document compliance with Condition D.3.7, the Permittee shall maintain records of the temperature of the upper stack of the cupola continuously.
- (d) To document compliance with Condition D.3.8, the Permittee shall maintain records of the pressure drop and flow rate readings of the scrubber once per shift when the cupola is in operation.
- (e) To document compliance with Condition D.3.10, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation.
- (f) To document compliance with Conditions D.3.9 and D.3.12, the Permittee shall maintain records of the results of the inspections required under Conditions D.3.9 and D.3.12 and the number and type of any parts replaced.

- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.15 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 (h) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) Pallet Line pouring process, constructed prior to 1977, with a maximum capacity of 16.5 tons of metal per hour and 153 tons of core and molding sand per hour, with emissions uncontrolled;
- (2) One (1) Pallet Line castings cooling process, constructed prior to 1977, with a maximum capacity of 16.5 tons of metal per hour and 153 tons of core and molding sand per hour, with emissions uncontrolled;
- (3) One (1) Herman 1 pouring process, constructed prior to 1977, with a maximum capacity of 30 tons of metal per hour and 155 tons of core and molding sand per hour, with emissions uncontrolled;
- (4) One (1) Herman 1 castings cooling process, constructed prior to 1977, with a maximum capacity of 30 tons of metal per hour and 155 tons of core and molding sand per hour, with emissions uncontrolled;
- (5) One (1) Herman 2 pouring process, constructed prior to 1977, with a maximum capacity of 37 tons of metal per hour and 166 tons of core and molding sand per hour, with emissions uncontrolled;
- (6) One (1) Herman 2 castings cooling process, constructed prior to 1977, with a maximum capacity of 37 tons of metal per hour and 166 tons of core and molding sand per hour, with emissions uncontrolled;
- (7) One (1) Herman 3 pouring process, constructed prior to 1977 and modification permitted in 1991, with a maximum capacity of 28 tons of metal per hour and 165 tons of core and molding sand per hour, with emissions uncontrolled;
- (8) One (1) Herman 3 castings cooling process, constructed prior to 1977 and modification permitted in 1991, with a maximum capacity of 28 tons of metal per hour and 165 tons of core and molding sand per hour, with emissions uncontrolled;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (a) The PM emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.118 pounds per ton metal each.
- (b) The PM 10 emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.052 pounds per ton metal each.
- (c) The SO₂ emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.020 pounds per ton metal each.

- (d) The NO_x emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.010 pounds per ton metal each.
- (e) The VOC emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.163 pounds per ton metal each.
- (f) The Lead emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 pouring processes shall be limited to 0.016 pounds per ton metal each.
- (g) The PM emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 cooling processes shall be limited to 0.288 pounds per ton metal each.
- (h) The PM₁₀ emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 cooling processes shall be limited to 0.196 pounds per ton metal each.
- (i) The VOC emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 cooling processes shall be limited to 0.687 pounds per ton metal each.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process

D.4.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) from the Pallet Line pouring/casting operation shall not exceed 56.7 pounds per hour when operating at a process weight rate of 170 tons of sand and metal per hour.
- (b) The particulate matter (PM) from the Pallet Line castings cooling operation shall not exceed 56.7 pounds per hour when operating at a process weight rate of 170 tons of sand and metal per hour.
- (c) The particulate matter (PM) from the Herman 1 pouring/casting operation shall not exceed 57.7 pounds per hour when operating at a process weight rate of 185 tons of sand and metal per hour.
- (d) The particulate matter (PM) from the Herman 1 castings cooling operation shall not exceed 57.7 pounds per hour when operating at a process weight rate of 185 tons of sand and metal per hour.
- (e) The particulate matter (PM) from the Herman 2 pouring/casting operation shall not exceed 58.7 pounds per hour when operating at a process weight rate of 203 tons of sand and metal per hour.
- (f) The particulate matter (PM) from the Herman 2 castings cooling operation shall not exceed 58.7 pounds per hour when operating at a process weight rate of 203 tons of sand and metal per hour.
- (g) The particulate matter (PM) from the Herman 3 pouring/casting operation shall not exceed 58.1 pounds per hour when operating at a process weight rate of 193 tons of sand and metal per hour.
- (h) The particulate matter (PM) from the Herman 3 castings cooling shall not exceed 58.1 pounds per hour when operating at a process weight rate of 193 tons of sand and metal

per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour} \end{array}$$

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) Herman 1 and Pallet Line shakeout process, constructed prior to 1977, with a maximum capacity of 46.5 tons of metal per hour and 308 tons of core and molding sand per hour, with emissions controlled by scrubber C and exhausting to stack C;
- (2) One (1) Herman 1 and Pallet Line mold sand handling process, constructed prior to 1977, with a maximum capacity of 300 tons of molding sand per hour, with emissions controlled by scrubbers B and C, and exhausting to stacks B and C respectively;
- (3) One (1) Herman 2 shakeout process, constructed prior to 1977, with a maximum capacity of 37 tons of metal per hour and 166 tons of core and molding sand per hour, with emissions controlled by scrubber B and exhausting to stack B;
- (4) Herman 2 mold sand handling operations constructed prior to 1977, with a maximum capacity of 150 tons of molding sand per hour, with emissions controlled by baghouse F, and baghouse Y and exhausting to stacks F, and Y respectively;
- (5) One (1) Herman 3 shakeout process, constructed prior to 1977 and modification permitted 1991, with a maximum capacity of 28 tons of metal per hour and 165 tons of core and molding sand per hour, with emissions controlled by scrubber E and baghouse W and exhausting to stack E and W respectively;
- (6) Herman 3 molding sand handling operations constructed prior to 1977 and modification permitted in 1991, with maximum capacity of 150 tons of molding sand per hour, with emissions controlled by scrubbers D and E, and baghouse W, and exhausting to stacks D, E and W respectively;
- (7) One (1) waste sand transport process, constructed prior to 1977, with a maximum capacity of 20 tons of waste sand per hour, with emissions controlled by baghouses G and R and exhausting to stack G and R, respectively;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (a) The PM emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.034 pounds per ton metal and sand each.
- (b) The PM₁₀ emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.058 pounds per ton metal and sand each.
- (c) The VOC emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.115 pounds per ton metal and sand each.
- (d) The lead emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.00018 pounds per ton of metal each.

- (e) The PM emissions from the waste sand transport process shall be limited to 0.072 pounds per ton sand each.
- (f) The PM10 emissions from the waste sand transport process shall be limited to 0.011 pounds per ton sand each.
- (g) The amount of core and mold sand handled for the entire source shall be limited to 1,127,516 tons of sand per twelve consecutive month period.
- (h) The amount of sand throughput to the waste sand transport process shall be limited to 112,752 tons of sand per twelve consecutive month period.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process.

The Herman 3 molding line emission units covered by this condition have been referred to enforcement for allegedly violating PSD. The permit shield covered by 326 IAC 2-7-15 does not apply to this condition and compliance with this condition shall not be deemed compliance with 326 IAC 2-2 or 40 CFR 52.21.

D.5.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) from the Herman 1 and Pallet Line shakeout operation shall not exceed 64.91 pounds per hour when operating at a process weight rate of 354.50 tons of sand and metal per hour.
- (b) The particulate matter (PM) from the Herman 1 and Pallet Line mold sand handling operation shall not exceed 63.0 pounds per hour when operating at a process weight rate of 300 tons of molding sand per hour.
- (c) The particulate matter (PM) from the Herman 2 shakeout operation shall not exceed 58.7 pounds per hour when operating at a process weight rate of 203 tons of sand and metal per hour.
- (d) The particulate matter (PM) from the Herman 2 mold sand handling operation shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons of molding sand per hour.
- (e) The particulate matter (PM) from Herman 3 shakeout operation shall not exceed 58.1 pounds per hour when operating at a process weight rate of 193 tons of sand and metal per hour.
- (f) The particulate matter (PM) from Herman 3 mold sand handling operation shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons of molding sand per hour.
- (g) The particulate matter (PM) from the baghouses G and R controlling the waste sand transport operation shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons of waste sand per hour.

Compliance with the limits in D.5.1 will also demonstrate compliance with this condition.

The pounds per hour limitations for (a) and (f) were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40$$

where E = rate of emission in pounds per hour;
and
P = process weight rate in tons per hour

The pounds per hour limitation for (i) was calculated with the following equation:

Interpolation of the data for the process weight rates less than or equal to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour;
and
P = process weight rate in tons per hour

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 18 months after startup of the new hot box core making process, the Permittee shall perform PM and PM10 testing on baghouse F, baghouse Y and scrubber B controlling Herman 2 shakeout and sand handling processes using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.5.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensable PM10.

D.5.5 Emission Controls

- (a) The wet scrubber C for PM control shall be in operation and control emissions from the Herman 1 and Pallet Line shakeout and sand handling at all times that either of these processes is in operation.
- (b) The bin vent shall be in place at all times that Herman 1 and Pallet Line sand handling are in operation.
- (c) The wet scrubber B for PM control shall be in operation and control emissions from the Herman 2 shakeout, the Herman 1 and Pallet Line mold sand handling, and the Herman 2 mold sand handling at all times that any of these processes is in operation.
- (d) The baghouses F and Y for PM control shall be in operation and control emissions from the Herman 2 mold sand handling at all times that the Herman 2 mold sand handling is in operation.
- (e) The baghouse W and wet scrubber E for PM control shall be in operation and control emissions from Herman 3 shakeout or mold sand handling at all times that either of these processes is in operation.
- (f) The baghouse W and wet scrubbers D and E for PM control shall be in operation and control emissions from the Herman 3 mold sand handling at all times that the Herman 3 mold sand handling is in operation.
- (g) The baghouses G and R for PM control shall be in operation and control emissions from

the waste sand transport system at all times that the waste sand transport system is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.6 Visible Emissions Notations

- (a) Visible emission notations of the wet scrubbers B, C, D, E and baghouses F, G, R, W and Y stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and when the associated processes are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.7 Scrubber Parametric Monitoring

The Permittee shall record the total static pressure drop and flow rate of scrubbers B, C, D and E used in conjunction with the Herman 1, Pallet line, Herman 2 and Herman 3 shakeout processes and Herman 1, Pallet line, Herman 2 and Herman 3 mold sand handling processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet scrubber is below a minimum of 8 inches of water or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of 225 gallons per minute or a minimum flow rate established during the latest stack test. A pressure reading or flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressures and flow rates shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.8 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubbers B, C, D and E. All defective scrubber parts shall be replaced.

D.5.9 Scrubber Failure

In the event that scrubber failure has been observed:

- (a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this

permit.

- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

D.5.10 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses F, G, R, W and Y used in conjunction with the Herman 2 and Herman 3 mold sand handling, Herman 3 shakeout process and the waste sand transport processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.11 Baghouse Inspections

An inspection shall be performed each calendar quarter of all the bags controlling the Herman 1 and Pallet Line shakeout and mold sand handling emissions, Herman 3 mold sand handling emissions and the waste sand transport emissions. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.13 Record Keeping Requirements

- (a) To document compliance with condition D.5.1, the permittee shall maintain records of the sand handled and the waste sand transported each month.

- (b) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the baghouses and wet scrubbers stack exhausts once per shift during normal daylight hours when exhausting to the atmosphere and when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.
- (c) To document compliance with Condition D.5.7, the Permittee shall maintain records of the pressure drop and flow rate readings of the scrubbers once per shift when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.
- (d) To document compliance with Condition D.5.10, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation.
- (e) To document compliance with Conditions D.5.8 and D.5.11, the Permittee shall maintain records of the results of the inspections required and the number and type of any parts replaced.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 (g) and D.5.1 (h) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) SB-1 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse H;
- (2) One (1) SB-2 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse H;
- (3) One (1) SB-3 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse H;
- (4) One (1) SB-4 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse H;
- (5) One (1) SB-5 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse AG;
- (6) One (1) SB-6 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse AG;
- (7) One (1) SB-7 Pangborn shot blast machine, constructed in 1978, with a maximum capacity of 6.0 tons of iron castings per hour, with emissions controlled by baghouse K;
- (8) One (1) SB-8 shot blast machine, constructed in 1988, with a maximum capacity of 8.0 tons of iron castings per hour, with emissions controlled by baghouse AG;
- (9) One (1) SB-9 shot blast machine, constructed in 1995, with a maximum capacity of 12.5 tons of iron castings per hour, with emissions controlled by baghouse X;
- (10) Grinders GR1 through GR10, GR25, GR 29 and GR30, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse AD;
- (11) Grinders GR11 through GR14, GR16 and GR17 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse AG;
- (12) Grinders GR19 through GR23 and Grinders 34 through 36 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse K;
- (13) Grinders GR31 through GR33, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse X.

Note: The grinders are considered insignificant activities, but are listed here because some baghouses control a combination of grinders and shotblast machines.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

- (a) The PM emissions from each shot blast machine shall be limited to 0.5066 pounds per ton of metal finished.
- (b) The PM₁₀ emissions from each shot blast machine shall be limited to 0.5066 pounds per ton of metal finished.
- (c) The lead emissions from each shot blast machine shall be limited to 0.0045 pounds per ton of metal finished.
- (d) The total finished metal from the entire foundry shall not exceed 112,752 tons of castings finished per twelve consecutive month period.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 do not apply to the new hot box core making process.

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from each of the shot blast machines SB-1, SB-2, SB-4 and SB-5 shall not exceed 12.1 pounds per hour each, when operating at a process weight rate of 5 tons of iron castings per hour each.
- (b) The particulate matter (PM) emissions from each of the shot blast machines SB-3, SB-6, and SB-8 shall not exceed 8.56 pounds per hour each when operating at a process weight rate of 3.0 tons of iron castings per hour each.
- (c) The particulate matter (PM) emissions from shot blast machine SB-7 shall not exceed 13.62 pounds per hour when operating at process weight rate of 6.0 tons of iron castings per hour.
- (d) The particulate matter (PM) emissions from baghouse X controlling the shot blast machine SB-9 shall not exceed 22.3 pounds per hour when operating at a process weight rate of 12.5 tons of iron castings per hour.
- (e) The particulate matter (PM) emissions from each of the grinders shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4.0 tons of iron castings per hour each.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour} \end{array}$$

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the baghouses controlling the shotblasters.

Compliance Determination Requirements

D.6.4 Emission Controls

- (a) The baghouse H for PM control shall be in operation and control emissions from the shotblasters SB-1, SB-2, SB-3, and SB-4 at all times that any one of these shotblasters is in operation.
- (b) The baghouse AG for PM control shall be in operation and control emissions from the shotblasters SB-5, SB-6, and SB-8 at all times that any one of these shotblasters is in operation.
- (c) The baghouse K for PM control shall be in operation and control emissions from the shotblaster SB-7 at all times that the shotblaster SB-7 is in operation.
- (d) The baghouse X for PM control shall be in operation and control emissions from the shotblaster SB-9 at all times that the shotblaster SB-9 is in operation.
- (e) The baghouse AD for PM control shall be in operation and control emissions from grinders GR1 through GR10, GR25, GR 29 and GR30 at all times that grinders GR1

through GR10, GR25, GR 29 and GR30 are in operation.

- (f) The baghouse AG for PM control shall be in operation and control emissions from grinders GR11 through GR14, GR16 and GR17 at all times that grinders GR11 through GR14, GR16 and GR17 are in operation.
- (g) The baghouse K for PM control shall be in operation and control emissions from grinders GR19 through GR23 and Grinders 34 through 36 at all times that grinders GR19 through GR23 and Grinders 34 through 36 are in operation.
- (h) The baghouse X for PM control shall be in operation and control emissions from grinders GR31 through GR33 at all times that grinders GR31 through GR33 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouses H, K, AG, and X stack exhausts shall be performed once per shift during normal daylight hours when exhausting to the atmosphere and when the shotblasters are in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.6.6 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouses H, K and X used in conjunction with shotblasters, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.6.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shotblasters. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.6.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

- (a) To document compliance with condition D.6.1 (d), the source shall maintain record of the total metal finished per month.
- (b) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the baghouse H, AG, K, and X stack exhausts once per shift when exhausting to the atmosphere and when the blasters are in operation.
- (c) To document compliance with Condition D.6.6, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation.
- (d) To document compliance with Conditions D.6.7, the Permittee shall maintain records of the results of the inspections required under Condition D.6.7.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit

D.6.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1 (d) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Cupola
Parameter: Metal Melted
Limit: 187,919 tons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Cupola charge handling facility
Parameter: Metal charged
Limit: 199,194 tons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: All shotblasters
Parameter: Finished Metal
Limit: 112,752 finished metal/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: All sand handling systems
Parameter: Sand handled
Limit: 1,127,516 tons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Waste Sand Handling Systems
Parameter: Sand throughput to the Waste Sand Handling Systems
Limit: 112,757 tons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Hot Box Sand Mixer #9
Parameter: Hot Box Resin Usage
Limit: 72,783.76 gallons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Hot Box Sand Mixer #9
Parameter: Hot Box Catalyst Usage
Limit: 14,716.51 gallons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Core Wash Dip Tank #1
Parameter: Core Wash Usage
Limit: 39,207.57 gallons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation, Warsaw Manufacturing Facility
Source Address: 1900 East Jefferson Street, Warsaw, IN 46581-1388
Mailing Address: P.O.Box 1388, Warsaw, Indiana, 46581-1388
Source Modification No.: 085-14027-00003
Facility: Hot Box Sand Mixer #9
Parameter: Release agent Usage
Limit: 6,828.31 gallons/yr

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is required for this report.

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Dalton Corporation, Warsaw Manufacturing Facility
P.O.Box 1388
Warsaw, Indiana, 46581-1388

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that Dalton Corporation, Warsaw Manufacturing Facility, 1900 East Jefferson Street, Warsaw, Indiana, 46581-1388, completed construction of the new hot box core making process and the two (2) core ovens on the phenolic core making lines #4 and #5 on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on March 07, 2001 and as permitted pursuant to **Construction Permit No. CP-085-14027, Plant ID No. 085-00003** issued on _____.
5. Additional operations/facilities were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 20 _____.
My Commission expires: _____

Signature

Name (typed or printed)